THE TRUST PROBLEM

SUMMARY

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IV. The alleged advantages of combinations, 677. — Desire to secure monopoly and promoter's profits in fact the cause of combinations, 678. — A monopolistic combination not necessarily more efficient than a limited one, 679. — Inductive evidence inconclusive, 680. — General reasoning, on advantages from magnitude of operations, 685; from combination as such, 686; from elimination of competition, 689. — Monopoly tends to stagnation, 695. — Summary of conclusions, 696.

III. Ultimate Results of Permitting and Regulating Combinations

In the preceding lectures (printed in this Journal for May, 1914) we have undertaken to show that it is necessary either to prohibit and destroy the trusts and pools or to regulate their prices and profits. Merely to prohibit unfair competitive methods and to deprive combinations of special privileges would not, in all probability, remove their power to extort monopoly prices. We further sought to show that it is possible to prevent the formation of combinations having effective monopoly power, and possible also in large measure to break up such combinations as already exist. The American people, therefore, are in a position to choose between the policy of regulating permitted trusts and pools, and the policy of prohibiting and

destroying them. In making this choice they must first consider what would be the difficulties and what the probable results of a policy of regulation. They must then consider whether the advantages of combinations from the standpoint of efficiency and economy are great enough to justify permitting them to exist despite the difficulties of regulating them.

Few of those who have advocated the policy of permitting combinations to exist subject to regulation by the government seem to have given much thought to the magnitude of such a task, its difficulties, or its ultimate outcome. They have had in mind the comparatively few closely knit trusts of the present time, or possibly only a part of those trusts. They have had in mind particularly the so-called " good " trusts with their alleged superior efficiency and their more or less reasonable policy toward the public.

In the first place, it would be difficult to limit the number of trusts under such a policy. It is, of course, conceivable that the government should undertake to suppress combinations in general, while permitting a few particular trusts to exist. A limited number of trusts might be tolerated, not because of the good motives or exceptional ability of their managers, but because of special economic characteristics of the industries concerned which tended to make combination particularly economical or to make the maintenance of competition peculiarly difficult. Such a plan would not necessarily lead to unreasonable discrimination between individuals and classes, tho to determine what were the extraordinary conditions justifying the existence of a trust would be extremely hard. If, however, the people once concede the right of a monopolistic combination to exist, independently of extraordinary conditions, a sense of justice should apparently compel

them to permit combinations *ad libitum*. What is sauce for the goose is sauce for the gander. Under no theory of justice could all the trusts heretofore organized be permitted to continue without granting permission to organize trusts in every other field. Moreover, if the government permitted trusts freely to organize, it would have to permit pools also, at least until it was demonstrated that the trusts had material economies and other advantages and that the pools had no such advantages.

In the second place, it would seem that if combinations having power to restrain trade are to be permitted at all, they must be permitted to become as comprehensive as they desire. Why should a combination not be allowed to take over 100 per cent of the business in its field quite as readily as 90 or 80 or 70 per cent? Very few persons desire to prohibit combinations which control only a small proportion of a given industry and which possess no possible monopoly power; but if we permit that limit to be overstepped at all, there is no limit.

One can only speculate how numerous and how comprehensive the trusts and pools would become if the policy were adopted of permitting them freely but subjecting them to regulation. Presumably the disinclination to submit themselves to government regulation would prevent business men from forming combinations as universally as they would if combinations were permitted without regulation. It is quite possible that the field of combination would become immensely great. In all probability it would become far greater than at present. Beyond question, moreover, every combination, unless prevented by the government, would take in just as large a proportion of the trade as could be persuaded to enter it. In many cases this would mean the entire trade.

If combinations were freely permitted and no limit placed upon their magnitude, neither actual nor potential competition would be an adequate check upon prices and charges for service. This was, I think, sufficiently demonstrated in the first lecture. Government regulation would unquestionably be necessary.

Some have suggested that regulation would be comparatively simple. Good trusts would be left alone and only bad trusts interfered with, and the fear of government intervention would make most of the trusts good. The government, some seem to think, could let the trust go its own way until it was proved to have become extortionate or to have used unfair competitive methods, and could then step in and punish its officers, or suspend its right to do business for a season, or even dissolve it altogether. Such a course is fundamentally inconsistent with the principle of permitting combinations at all. How is the trust manager to know in advance what prices or what practices will be adjudged so unreasonable as to call for criminal prosecution? What advantage would there be in breaking up a trust the first time it went too far, if another trust could be formed in its place the next day? It would be intolerable to the users of the products or the services of a trust to stop its business, even temporarily, as a punishment for unreasonable prices or unfair methods of competition. A good trust may become a bad trust overnight. Shall it be a lawful organization today and an outlawed wreck tomorrow? Regulation of combinations implies continuity of the combinations.

Even if the government adopted the policy of punishing trust managers or breaking up combinations, as a penalty for extortionate prices and unfair practices, it would require almost as thoro and continuous investigation and quite as difficult judgment on the part of the

government to determine when to inflict such penalties as to determine the proper prices and practices for the future. It would be most unjust to take drastic action against a trust or its managers without possession of most detailed knowledge of all the conditions.

In its very essence, however, regulation implies, not punishment of past action, but prescription of future action. This means simply that the government, if it undertakes to regulate the trusts and combinations, will ultimately have to fix their prices or limit their profits, or both. After all, the one thing in which the general public is interested is the reasonableness of prices and charges. The prevention of combinations in restraint of trade and of unfair competitive methods are not ends in themselves. There is no way to insure reasonable prices under monopoly except to restrict them, — to fix them outright, or to limit the profits in such a way as to remove the incentive to unreasonable prices.

If the government enters upon the policy of fixing prices and profits strictly, ought it not to go a step further and guarantee to the combinations a permanent monopoly, protecting them against competition? It has long been urged by the owners of railroads and other public service industries that justice to investors demands protection against competition as a concomitant of regulation of rates and charges. The public has been gradually coming to accept this view. If for a series of years the investor in trust securities has had his profits held down to a low percentage by government regulation, it is hardly fair for the government to permit those profits to be still further lowered, perhaps wholly destroyed, by the advent of a competitor.

Whatever might be the outcome of government regulation in this respect, there can be no doubt of the

immense difficulty of just and efficient regulation of the prices or the profits of industrial combinations. As already shown, the field to be covered by regulation would probably be exceedingly wide and diverse. The federal government and the states would have to maintain elaborate and powerful machinery to control the combinations. The task of regulation could not possibly be left to the courts, lacking as they are in the necessary machinery for investigation and occupied as they are with many other duties.

Consider for a moment the nature of the task which would confront such an administrative body. In the first place, it would have to possess at all times detailed information regarding all the concerns under its jurisdiction. It could not rest content with making special investigations from time to time on its own initiative or on complaint. Railroad rates and the charges of public service corporations are ordinarily comparatively stable, and properly so; but the prices of many other commodities, if not of most, are necessarily variable. The costs of materials may change greatly and rapidly. The conditions of demand are changeable. Grave injury might be done to the public during the time required for securing information on which to base action if such information were not continuously in the possession of the regulating authority. Even annual reports would not always be adequate; quarterly or monthly data might be required.

In the second place, the amount of detail involved would be enormous. A proper fixing of prices would require complete knowledge of the costs of production and of the amount of investment. In order to make sure of obtaining accurate information, the government would have to prescribe the methods of accounting. It would be impossible to prescribe uniform methods, as

is done by the Interstate Commerce Commission in the case of the railroads. The bewildering variety of conditions in the different industries would have to be provided for. On the basis of accounting methods thus prescribed, detailed reports would have to be made to the government and these would have to be scrutinized and studied with utmost care. The federal government particularly would have to employ a vast corps of expert accountants, statisticians, and specialists familiar with the peculiar conditions in the different industries.

The difficulties of cost accounting are so great that many even of the largest business concerns have found it impossible to ascertain the costs of their products on scientific principles, or at any rate have considered it not worth while to incur the necessary expenses for that purpose. The business concern can get along without accurate knowledge of its own costs. Its prime interest is in demand and in profits. The government, however, in fixing prices, must know all about costs — both operating costs and capital charges. They are the very things which primarily determine the reasonableness of prices. The limiting of profits would require somewhat less detailed information than the limiting of prices, but would still require a vast mass of data.

In the third place, the determination of costs and of investment for the purpose of fixing prices or profits would involve immensely difficult problems of judgment. The judgment of the regulating body would be constantly challenged by the combinations and the probable result would be endless litigation. The proper allowance for depreciation and obsolescence, the proper apportionment of overhead charges among different products and services, the proper methods of valuing the different elements of investment, — these and

similar matters would have to be passed upon by the regulating authority. Such problems are difficult enough as they confront the Interstate Commerce Commission, which has to deal with one kind of business only. They would be far more difficult for a body dealing with multifarious combinations in widely differing industries.

Even if the regulating authority should succeed in working out a satisfactory determination of costs of production and value of investment, it would still be beset with troubles in fixing prices or limiting profits. Demand for goods is variable even in non-competitive industries. Even if the combinations should be protected against competition from domestic concerns, foreign concerns would have to be reckoned with. Unchanging prices or prices bearing an unchanging relation to costs would not be practicable in mining, manufacturing and mercantile business. A combination might at times be justified in reducing prices and consequently profits below a normal level in order to stimulate demand and keep its force employed, or in order to meet foreign competition. The government would have then to determine to what limit prices or profits could subsequently be advanced in order to offset these reductions. In other words, the government would be dealing with a constantly changing problem of demand, just as the manager of any private business does. Particularly difficult would be the fixing of proper prices for products produced at joint cost. Take petroleum, for example. A wide variety of commodities are derived from the one raw material, crude oil. Some of these are in so little demand that they must be sold for less than the price of crude oil itself. Others are in great demand and can be sold for high prices. It is impossible to use cost as a basis for deter-

mining prices of the specific products. The relative demand for the several products varies from day to day. For a regulating body to determine the proper relationship of the prices of these joint products is virtually impossible. This and several other important industries would have to be regulated, if at all, by limiting profits rather than prices.

It is sometimes suggested that the same problem of joint costs confronts the Interstate Commerce Commission with respect to the relative freight rates on different commodities. It should be noted, however, that after making due allowance for actual and measurable differences in the cost of transporting different commodities, the Commission could, without actually destroying railroad business, fix precisely the same rate per unit for every class of commodities. Such a policy is by no means unthinkable and might be better than the often extraordinary differences which now exist. For petroleum products on the other hand — and the same is true of a good many other products similarly produced under joint cost — flat prices would be absolutely impossible. Furthermore, it cannot be said that the Interstate Commerce Commission has satisfactorily solved the problem of fixing relative rates on different commodities. It has in fact left that problem almost untouched, and if it ever does enter seriously upon it, the Commission may find difficulties practically insuperable.

One could continue almost indefinitely setting forth the complexities and difficulties of government regulation of the prices and profits of combinations. Most people feel that for the government actually to fix definite prices for a multitude of industries, or even to limit their profits specifically, would be impracticable. Many advocates of government regulation hope some-

how to get along in a more rough and ready manner. They vaguely contemplate a vague form of regulation. They expect the government to exercise a general restraining influence, to intervene occasionally and to render its judgments in a more or less hit and miss fashion. They hope that with the hand of the government resting upon them, as it were, in a general sort of way, and with potential competition also exercising some restraining influence, the combinations for the most part will behave themselves decently. They count upon the alleged superior efficiency of the trusts in production and marketing to counterbalance the ineffectiveness and incompleteness of regulation.

Doubtless we could get along after a fashion with such a superficial form of regulation as this. It would be difficult, however, to prove that the public would be any better off under such a régime of half-regulated monopoly than under a régime of competition enforced as well as possible by laws against combinations and monopolies. Remove once the fear of penalties or of dissolution, and the combinations would always be crowding the limit of public tolerance. On the average, and in the long run, their prices and charges might not be greatly above a fair level, but they would almost certainly be somewhat above that level. Combination must be proved decidedly more efficient than competition before the people would be justified in trusting trusts under any but most rigid government control.

The work of the Interstate Commerce Commission in regulating railroads is often held up as demonstrating the practicability of successful government regulation of trusts. It has already been shown, however, that the regulation of trusts would be a much more complex task than the regulation of railroads. Moreover, with all due respect to the great intelligence and fairness

with which the Interstate Commerce Commission has discharged its duties, we may yet question whether the ability of the Commission to regulate the railroads satisfactorily has been put to a final test. The Commission has thus far been concerned chiefly with the relationship of rates between different places. It has corrected many abuses in this respect, tho many still remain. As already stated, it has done very little to change the relation between the rates on different commodities, a relation which is often unreasonable. The commission has never had to face the problem of reducing the general level of rates for all railroads or for any particular railroad. The enormous increase in the volume of traffic during recent years would have enabled the railroads to obtain altogether unreasonable profits under existing rates, had it not been for the coincidence of a great advance in the prices of commodities and in the costs of railroad operation. Had this not happened, the Commission would have been called upon to reduce rates in a wholesale manner and it would have found that task immensely complicated, besides encountering tremendous opposition from the railroads and the many who sympathize with them. The task just now before the Commission, of determining whether, or by how much, railroads shall be permitted to advance rates is a far easier task than that of compelling a general lowering of rates.

Government regulation of prices and profits of private concerns always involves a large element of waste, of duplication of energy and cost. It means that two sets of persons are concerning themselves with the same work. The managers and employees of the corporations must study cost accounting and conditions of demand in determining price policy. The officers and employees of the government must follow and do it all

over again. Moreover, the fact that these two sets of persons have different motives in approaching their work means friction and litigation, and these spell further expense. To superimpose a vast governmental machinery upon the vast machinery of private business is an extravagance which should be avoided if it is possible to do so.

The policy of government regulation of industry may readily become a stepping stone to government ownership and socialism. The chances are strong that the government of the United States will take over the telegraphs and telephones in the near future and the railroads within less than quarter of a century. The demand for government ownership of these as well as of municipal public utilities may come from various sources. If regulation by the government proves ineffective in securing reasonable rates and charges, the general public will demand government ownership. If regulation proves so effective as to leave only moderate returns to the stockholders of the corporations, the stockholders are likely to urge government purchase, which would at least assure them of a more certain income. In either case the excessive cost of government regulation will be urged as a reason for government ownership. In the same way, if the government undertakes detailed regulation of combinations in manufacturing, mining and trade, there is bound to be a strong movement for government ownership in these fields also.

Government ownership of this or that industry is not necessarily a bad thing. Even government ownership of a large proportion of the industries of the country, nay, even complete socialism, need not necessarily affright us. To discuss the merits of government ownership would take us too far afield. It is sufficient

merely to point out that the people ought not to enter on the path of permitting and regulating combinations without considering the advantages and disadvantages of this, the possible ultimate outcome, as well as those of the immediate policy itself. If it could be proved that combination is materially more economical than competition, we should doubtless be wise to say farewell to competition. Presumably in that case we ought to test thoroly the practicability of government regulation of private monopoly before proceeding further. The people would naturally first try the plan of government ownership, if at all, in limited fields, and compare the results with those under regulated monopoly before undertaking general government ownership. It is by no means improbable that the ultimate outcome would be socialism. The future is very likely to see either a régime of general competition — with, of course, some special exceptions — or a régime of universal communism. Clearly then we should be very sure of our ground before we take the first step toward possible communism. We should convince ourselves beyond all doubt that competition is impossible; or that, if possible, it is less efficient than monopoly, — not merely at certain times and in certain places, but generally and permanently, — before we tolerate widespread combination in the field of business.

We have not referred here to the effects of regulation upon the trusts themselves. We have considered only the difficulties which the government would encounter in an attempt to regulate trusts. It is quite possible that regulation would largely destroy that very efficiency which is held up as the reason for permitting them to exist. The discussion of this topic, however, belongs more properly with the next lecture, in which the alleged superior efficiency of trusts will be considered in detail.

IV. The Alleged Advantages of Combination

In the preceding lecture we have tried to show that regulation of the prices and profits of trusts and pools would involve much difficulty. Nevertheless, if it could be shown that combinations controlling a large proportion of their respective industries were necessary to secure the highest economy and efficiency, and possessed other economic advantages, the proper course would be to permit such combinations, while subjecting them to regulation.

Claims of this sort are put forth with much vigor in behalf of the trusts. We are told by many that the trust is a natural evolution, that it is the last word in industrial progress, that to destroy it would be to turn the hands of the clock backward. Let us restrict monopolistic greed, they say; let us, if necessary, destroy the bad trusts; but let us not lose the advantages of good and efficient trusts. Some go further and descant on the evils, nay, the immorality, of competition, the superiority of peace over the sword in industry as in international politics. War is hell; competition is war, say they.

The claim that the trust possesses superior efficiency deserves thoro and fair consideration. The assertion that the desire for greater efficiency was the primary motive in the organization of the trusts, however, is not in accordance with the facts. The trust was far from being a natural sequence in the progress of methods of production. In a sense, everything that happens in economic history is a natural evolution. It is due to the working of laws. But in the sense in which trust defenders use the phrase, the trust movement in the United

States was anything but a natural evolution. It was essentially artificial. The basic motive for the organization of most trusts was to suppress competition, to maintain or advance prices. Hostile criticism from without was met by the proclamation of other motives and the prophecy of other results. Within the camp, talk was all of the advantages of checking competition. That was the appeal to the owners of the concerns which were invited to enter the fold. That was the appeal to the investors in securities. Indeed, many of the leaders in the trust movement admitted frankly to the public — before the Industrial Commission of 1899, for example — that desire to check so-called destructive competition was their original incentive.

A second important factor in the organization of trusts, particularly during the most active period of trust formation from 1898 to 1901, was the desire for profits of promotion and of speculation. The promoter with his glib tongue and glowing prospectus was very much in evidence. There was a craze for combinations among business men and investors. Over-capitalization was a practically universal feature of the corporate combinations of this period. Over-capitalization was designed in part to conceal from the public the profits of operation. Even more, its purpose was to help promoters unload properties upon the investing public at high valuations.

The fact that the trust movement was largely based on illegitimate motives and fostered by artificial methods does not demonstrate that trusts are disadvantageous to the general public, but it should at least dim the halo of sanctity with which some seek to surround them. It places them on the defensive.

The main argument in favor of the trusts, their supposed superior efficiency and economy, can scarcely

be advanced in behalf of the pools. To affect costs materially, the combination must control fully all the operations of its constituent concerns. This the pool does not attempt to do. In fact, very few of the advocates of trusts attempt to defend pools. Yet should the policy of permitting combinations to exist be adopted, it would be found difficult, constitutionally and practically, to draw a rigid line between permitted trusts and prohibited pools.

Most of the discussions of trust efficiency, whether based on statistics and other facts of experience or on general reasoning, do not go to the true issue and therefore do not prove anything. It has been assumed that to show that a great combination of plants is more efficient than a single plant is to show the desirability of trusts. Far from it. The advocate of trusts must prove further the superiority of the trust — that is, the combination sufficiently comprehensive to possess or at least to threaten monopolistic power — over the smaller combination possessing no possible monopolistic power. He must show either that combinations increase in efficiency merely with increase in magnitude, or that the elimination of competition itself is necessary to the highest efficiency. Very few propose to prohibit combinations altogether; usually it is only monopolistic or potentially monopolistic combinations that are attacked.

The investigations of trusts hitherto conducted have been quite inadequate to prove whether or not they are the most efficient organization for conducting business. It is sometimes argued, therefore, that the people should defer judgment regarding the trusts pending further investigation of their efficiency. Some go so far as to suggest that the government undertake to determine for each industry the exact point at which the

size of combinations reaches the limit of economy in production and marketing. It is doubtful whether further investigations along these lines would be especially instructive. Serious difficulties stand in the way of reaching definite conclusions from them.

Even an effort to compare the efficiency of a trust régime with that of a régime of strictly separate plants and entire absence of combination holds little prospect of success. An investigation on this point might be undertaken in either of three ways. It might compare conditions in a given industry before and after the formation of the trust. It might compare the business of the trust with that of independent concerns in the same industry at the same time. It might compare trusts with independent concerns in other industries. Either of these methods of investigation encounters great obstacles from lack of cost data. So difficult is it to calculate costs accurately that many concerns, particularly those operating only a single plant, have not yet undertaken thoro-going cost accounting. Very few, indeed, of the plants which entered into the trusts had satisfactory cost accounts before that time and such accounts as did exist are in most cases no longer accessible.

But suppose by following the first of the methods of inquiry above mentioned it should be shown that, after taking into account changes in the prices of materials and in wages, a trust today was doing business more cheaply than its predecessor concerns ten or fifteen or twenty years ago. Would that prove the increase in efficiency to be due to combination? Efficiency has advanced also in industries where no combinations have been organized. This is the era of the cost accountant and the efficiency engineer. During recent years business men inside and outside of combinations have

been applying themselves to bettering methods more assiduously than ever before. Increased size of plants, larger and better machinery, better methods of organization are characteristic of practically every industry. The census statistics as to the average number of employees and of horse power per establishment seem to indicate that, while increase in average size of plants is perhaps more conspicuous in industries where the trusts are prominent, there is no marked difference between these industries and others in that respect.

Again, even if adequate data could be secured for an accurate comparison of the efficiency of a trust with that of its present single-plant competitors, this would not prove the advantage of a trust régime over a régime of separate plants. The inefficiency of the independent concerns may be due to the presence of the trust. The combination at its inception may have taken in all the larger and more efficient plants then existing. The fear of the trust, and the actual effect of its competition, fair or unfair, may have prevented the development of large competing concerns thereafter. The Standard Oil Company did produce more economically than its competitors. But who that is familiar with the outrageous tactics of the Standard toward competitors can attribute that fact wholly to the superiority of combination over competition ? Had no trust been formed in the oil industry there would certainly have developed by this time a number of large separate concerns, each with a considerable degree of integration, and with efficiency at least not greatly inferior to that of the Standard Oil Company.

In a few industries — the steel industry, for example — there are today comparatively large single-plant concerns standing side by side with combinations. Comparisons between them and the combinations with

respect to efficiency would be fair. It is unfortunate that the Bureau of Corporations, in its desire to protect the privacy of business, was unable to present the information which it possessed about the steel industry in such a way as to permit comparisons of this character. In can only be said that its report discloses wide variations in cost of production among the individual plants of the Steel Corporation itself. It is more than probable that some of the independent concerns are superior in efficiency to the less efficient plants of the Steel Corporation, and quite likely that they compare favorably even with the most efficient of those plants. Such concerns as Jones & Laughlin, the Lackawanna Steel Company, and the Cambria Steel Company are not weaklings. They have many millions of capital and a great output. They practise integration of related stages of production to a large extent. Their plants are largely new and up to date. The Lackawanna Steel Company at Buffalo preceded the Steel Corporation in the extensive use of the by-product coke oven, one of the most important of the modern forms of economy in the steel industry. Blast furnaces of Jones & Laughlin are among the record-holders for size and efficiency.

Finally, it is obviously very difficult to judge of the advantages of combination in production and marketing by comparing the business of combinations with that of single plants in other industries. The differences in the subject matter of production and in the conditions would in most cases render such comparisons of little value.

In view of these difficulties, it is certain that detailed investigations regarding the relative efficiency of trusts and single plants, even if they covered the entire field of industry, would result only in disagreement among the people as to the conclusions to be drawn. It would

probably be proved clearly enough that certain particular trusts were highly efficient. We might convince ourselves, not only that they were more efficient than the best of the predecessor concerns, or than the best of the present competing concerns, but also that they were more efficient even than such individual plants as might have come into existence in the absence of combination. In other industries, however, no such demonstration would be possible. The investigations would still leave doubt as to whether the trust in general was superior in efficiency to the separate plant.

But suppose, for purposes of argument, it should be demonstrated that in general the trust was more efficient than the individual plant. We should still have failed to show the superiority of the trust over the less extensive combination having no possibility of monopolistic power. That question could scarcely be attacked at all by statistical investigation of present or past conditions. The basis for comparisons does not exist. In very few industries did combination on a limited scale precede monopolistic combination on a large scale. In still fewer industries have there existed, side by side, a combination controlling the greater part of the business and another combination or combinations having only a minor fraction of the business. Comparison between the trust in one industry and the smaller combination in another industry would usually lead to no definite conclusions.

The fact is that we have had comparatively little experience with combinations other than trusts and pools of a more or less monopolistic character. If the desire to secure increased efficiency had been the only motive of business men in forming combinations, we might have witnessed a large number of combinations having no controlling proportion of the business in their

respective fields. But since the main object was to suppress competition, combinations of a more comprehensive character sprang at once out of the régime of separate plants.

There is no objection to further investigation regarding trust efficiency, provided it is not made an excuse for deferring action as to the dissolution of trusts. A wide-reaching investigation of trust efficiency would require not less than ten years. Every year that trusts are permitted to continue renders it more difficult to restore competition among their constituent concerns. The officers and managers year by year become more accustomed to working together; the organization year by year becomes more welded into an inseparable unit. The shock to business from breaking up combinations also will become more severe the longer it is deferred.

Since there are thus no adequate existing data on which to base conclusions as to the advantages of trusts from the standpoint of efficiency, we are forced to fall back upon general reasoning. The theoretical advantages claimed for the trusts by their defenders naturally fall into three groups — those attributable to mere magnitude, those attributable to combination of separate plants, and those attributable to the elimination of competition. The failure to make this obvious classification is the source of much fallacious thinking. Only advantages of the third class can properly be put forward as directly proving the desirability of trusts that possess a controlling proportion of the industry in which they are engaged.

The following are some of the advantages claimed for trusts which, so far as they exist at all, exist solely by reason of the magnitude of their business.

1. Command of the largest and most efficient units of production — buildings, power plants and machinery.

2. Command of large liquid capital and credit, enabling the concern to meet emergencies and to take advantage of special opportunities.

3. Command of superior administrative and technical ability.

4. Economy in the purchase of raw material and supplies in large quantities.

5. Distribution of administrative and other overhead expenses and of selling and advertising expenses over a large output, thus reducing unit costs.

6. Practicability of introducing efficient accounting systems too expensive for smaller concerns.

Any concern, if sufficiently large, can possess all these advantages. Magnitude of operation is purely a relative term. In minor industries, only a concern which has the greater part of the entire business can be considered large. In great industries the concern which has only a small fraction of the business may possess millions of capital, a vast plant and an army of employees. No one would think of denying that large scale operation has advantages over small scale operation. It does not follow that an industrial combination controlling the major part of a business will, by reason of size alone, be more efficient than a less extensive combination or even than a single large plant. Efficiency does not increase proportionately with size. It has been learned by the experience of business men that when the individual plant passes beyond a certain size, it ceases to gain in efficiency. The same causes which make this true of the individual plant apply to the combination of plants as well. There may be advantages from combination as such or from monopoly as such, but the advantages of mere magnitude have their limits. Moreover, when size passes beyond a certain point, it may even lessen efficiency. The unwieldiness

of a vast organization, the difficulty of securing coöperation among its parts, the impossibility of personal oversight by the master mind — these are disadvantages of excessive magnitude.

There may be some industries in which, from the standpoint of magnitude alone, the greatest efficiency would lie in a concern controlling virtually the entire business. There is little ground for believing that this is the case in the great majority of industries. At any rate it is utterly impossible, by general reasoning or by statistical investigation, to prove that it is so. Indeed, it would seem that in most industries a concern having even as much as half of the total business would, in respect to those elements of efficiency now under consideration, have no superiority over a somewhat smaller concern.

Another set of advantages claimed for trusts rests upon the fact of combination as such. These supposed advantages result from the assemblage of separate plants under a single control. They are not dependent on the elimination of competition. Among these are the following:

1. Use in all plants of the best methods and devices discovered in any one plant, comparative cost accounting rendering it possible to determine which are, in fact, the best.

2. Rivalry between the managers of different plants, stimulated by comparative cost accounts and other comparative data.

3. Saving in cross freights by shipping from the plant nearest to the desired destination.

4. Integration of industry — that is, the conduct of successive or related processes under a single management.

Combination undoubtedly does have its advantages. But combination, like magnitude, is a relative matter.

In a minor industry a combination of even a few plants may mean the bringing together of the larger proportion of the business. In another industry a combination including a considerable number of plants may have but a fraction of the total business. Any combination of plants, however few, can obtain the advantages specified in some degree. Just as economies of magnitude do not increase proportionately with magnitude, so economies of combination do not increase proportionally with the number of plants combined. There is a limit beyond which the addition of plants brings no further economy. Just where the limit is can be proved neither by abstract reasoning nor by statistical investigation. It is different in different industries. There is little reason to believe that in most industries a combination controlling the entire business would be appreciably superior, with respect to the elements of efficiency above mentioned, to a combination having a minor fraction of the business.

Take, for example, the matter of cross freights. In some industries freights are not an important element of expense. In others the location of materials, or of consuming markets, or like conditions, make it impossible to locate plants with a view to saving freight either on materials or products. There are, however, a good many industries in which scattered plants competing with one another incur much needless expense in transportation. In such industries a combination by shipping from the nearest plant could effect material savings. It does not follow that a combination of all the plants in the country could save more than a combination of a moderate number of well distributed plants.

Where an industry derives peculiar advantages from the integration of successive and related processes, combination on a large scale may be essential to the full realization of economies of this character. If in a

single one of the related branches of business the greatest efficiency requires the handling of a large part of the total business by a single organization, then it may be advantageous for the combination to conduct other branches of the business on a corresponding scale. There are, however, very few industries in which successful integration requires the control of the major part of the business by a single combination. In a good many instances a concern that has not more than a single plant engaged in each of the different stages of production has been able to secure an efficiency at least closely comparable with that of a wide-reaching combination. This is the case, for example, with several independent concerns in the steel industry and even with some of the recently developed independent concerns in the oil industry.

There is another economy sometimes claimed for the combination of separate plants, namely, that it is able to close down the inefficient plants and concentrate business in the largest and most modern. This, however, is not an advantage to the public. No combination, unless with monopolistic intent, would take in inefficient plants. The fact that a good many trusts have, shortly after their organization, dismantled numerous plants is proof simply of their monopolistic purpose. Under a régime of competition the inefficient plant will in due time be forced out of business and the public will no longer be burdened with supporting it. When a combination takes in an inefficient plant and dismantles it, the public pays the bill, provided the combination succeeds in obtaining a sufficient degree of monopoly power. The combination either charges prices high enough to enable it to write off the cost of such a plant out of its profits, or that cost is permanently represented by securities on which dividends are

expected to be paid. A combination which takes in a limited number of selected, efficient plants is in this respect far more conducive to economy than a monopolistic combination.

It thus appears probable that the economies claimed for the trusts could, in many if not most industries, be secured in approximately equal measure without permitting combinations sufficiently comprehensive to possess any approach to monopoly power. There remain those alleged economies of trusts which arise not from mere magnitude or from mere assembling of separate plants, but from the elimination of competition. These require more thoro consideration. They are few, namely:

1. Prevention of needless duplication of plants.
2. Elimination of that part of the cost of selling goods which results from the effort to secure business at the expense of competitors.
3. Elimination of waste due to irregularity of operation, and of the losses of so-called destructive competition.

Let us take these up in order:

1. It is contended that competition leads to excessive investment of capital, to the erection of plants with a capacity in excess of the needs of the country. This is true only in a very limited degree of ordinary mining, manufacturing, and commercial business. Such business differs radically from the so-called industries of increasing returns, such as transportation. In order that there shall be any rail transportation between two points, it is necessary to build a track which may have more than capacity enough for all the traffic. Under such conditions, the one railroad can increase its business without corresponding new investment. In fact, up to a certain limit, even the operating expenses of a

railroad do not increase proportionately with volume of business. The building of a second railroad under the conditions mentioned would mean unnecessary duplication of capital and perhaps also of the operating expenses.

In the case of the ordinary manufacturing industries it seldom happens that a single plant, however large, can supply the entire demand of the territory to which it has natural access. The construction of a second plant usually does not mean needless duplication of investment. The aggregate capacity of all plants is not likely to exceed materially the demand in times of prosperity. The desire of each competitor to be ready to get as large a share of the trade as possible may lead to some excess in plant capacity, but not to a great excess. Moreover, in manufacturing industries, even if there be some excess of plant capacity, operating expenses are not likely to be materially augmented. The plant working at less than full capacity can lessen its force more or less proportionately. Operating expenses vary fairly closely with output.

It must not be forgotten that the great majority of the industries of the country are steadily and rapidly growing. In industries where trusts are powerful, as well as in other industries, additional plant capacity is constantly being constructed, and additional working force taken on. Even if it were not for the growth of demand, the improvements in methods of production would necessitate the construction of new plants. The older and less efficient plants in a manufacturing industry ought not to be taken into account in judging the relation of plant capacity to demand.

The reasoning as to duplication of plant capacity which applies to manufacturing industries applies as well to mining and to mercantile business. There are

a few manufacturing industries in which it is customary for the manufacturer to conduct also some special form of transportation. Ecomony in such transportation may demand that duplication of plant be avoided, — that there be monopolistic operation. If the transportation business cannot be divorced from the manufacture, or subjected to separate regulation, monopolistic operation of the manufacturing business as well may be unavoidable or at least advantageous. For example, the Standard Oil Company and other leading refiners of petroleum operate pipe lines for transporting crude oil and also tank cars and tank wagons for delivering refined products. Needless duplication of plants and of operating expenses may be involved in competition in these two branches of the oil industry. Unless they can be divorced from the refining business proper, it may prove necessary to tolerate monopoly in petroleum refining. It has been proposed to require the owners of pipe lines, be they refiners or others, to transport oil as common carriers at reasonable charges to be fixed by the government. There are serious technical difficulties in the way, but it is probable that they could be overcome by special methods of government regulation. Whether it would be possible to manage the tank wagon delivery business in a similar way is more doubtful. Were it not for the extraordinary difficulty of regulating the prices of refined petroleum products, arising from the fact of joint cost, a simpler way of avoiding the evils of monopoly in the oil industry might be through such regulation of prices. Regulation of profits may be the most feasible plan of meeting the situation.

The Steel Corporation is also engaged in transportation. It operates railroads which to a large extent are patronized by its competitors, and it operates steam-

ships. To require the Steel Corporation to divest itself of its railroads — at least the more important lines which competitors may have occasion to use — would not materially lessen the efficiency of the integration secured by that corporation. Nor would there be any serious difficulty in effectively regulating the charges of such railroads if left in the control of the Steel Corporation. At any rate, the element of transportation in the steel industry is not a factor necessitating or justifying a combination of steel manufacturing plants of sufficient size to possess any approach to monopoly power.

2. It is contended further that competition means large waste in selling expenses, due to the endeavor of business concerns to wrest trade from one another through solicitation and advertising. This is doubtless true in some industries, but it is by no means equally true in all. Where the products of an industry are standard in character, are in steady demand, and are marketed through large middlemen or to large individual consumers, even the most vigorous competition in pushing the sale of goods involves no very great expense. In the case of certain other industries, heavy selling and advertising expenses are considered necessary by business men merely for the purpose of stimulating demand and regardless of competition. Concerns which have virtually a monopoly often spend great sums in advertising their wares. However, it must be admitted that in a good many industries competition in selling does mean some economic waste. The advantage of eliminating such waste can properly be set against the disadvantages of monopolistic control.

However, needless expense in selling goods is likely sooner or later to be reduced by informal understandings not amounting to monopolistic agreements. As the

competing concerns become larger and more efficient in production, their managers are likely to see the absurdity of trying to get all the trade away from one another.

3. Finally, it is contended that uncontrolled competition results in irregularity of consumption and consequently in irregularity of the operation of plants, which tends to increase costs as well as to injure the working classes and to disturb business generally. The most common illustration used to support this contention is that of the steel industry. It is urged that when by reason of active competition, prices are particularly low, the consumers of iron and steel and their cruder products buy excessive quantities and so discount their future needs as subsequently to result in very light demand. The plants in the industry, after being worked to their utmost capacity, may have to drop a large part of their force or even close altogether. Such irregularity in production is uneconomical. It has been maintained that the greater steadiness of prices since the organization of the United States Steel Corporation not only has tended to cheapen production but has been beneficial to consumers and to business generally.

It may well be questioned whether competition is as important a factor in causing irregularity of consumption of steel products as is sometimes supposed. The consumption of many of the more important products of iron and steel is necessarily variable. Those products are used primarily in the creation of new capital goods. The desire of men to invest in new capital goods varies greatly with the general conditions of prosperity or depression in business. The policy of the Steel Corporation in recent years has had less to do with the steadiness of demand for steel than the relatively continuous prosperity of the country.

If it were possible for trusts, when subjected to strict regulation by the government, to adjust supply accurately to demand, and to cause demand itself to be more steady, that fact would constitute an argument of considerable force in behalf of the policy of permitting trusts to exist subject to regulation. As already suggested, however, the task of the government in regulating prices for an industry subject to variable demand would be extraordinarily difficult. The efforts at doing so would probably prove far from successful in bringing about steadiness of production.

The argument with regard to the effect of competition in causing irregularity of consumption and of production is often extended further. It is urged that competition in modern industry tends to become so fierce as to destroy capital. So-called destructive competition, it is claimed, may bring even the most efficient concerns to bankruptcy. Such a result not only injures investors, but at least sometimes means actual waste of capital, and therefore, in the long run, injures consumers as well. Indeed, some believe that pools, tho possessing few advantages with respect to efficiency of production in other respects, are justifiable as means of preventing the losses of destructive competition.

The subject of destructive competition has been discussed in the second lecture with reference to its influence in driving concerns into combination. It was there shown that, in the great majority of manufacturing industries, competition is not likely to become as fierce as in transportation industries. The principle of increasing returns, which tends peculiarly to cause bitter competition, has little application in manufactures. The concern which finds current business unprofitable usually restricts its output or stops it altogether, looking to the time when the increase of

demand will again render the business of the plant profitable. It does not go on cutting prices until forced into bankruptcy.

Against these alleged advantages of monopolistic combination must be set the tendency of monopoly to lessen efficiency and retard industrial progress. It is generally recognized that the possession of a monopoly tends strongly toward stagnation. Competition is a powerful spur to efficiency. The competitor who would not go to the wall must be ever on the alert. Inventions of machinery and improvements in methods are essential to successful competition. Marked as has been the progress in the railroad business of the United States, there is much reason to believe that American railroads have made less progress during the last decade or two than most American manufacturing industries, and that this is due to the comparative absence of competition in the railroad business during recent years. The relative unprogressiveness of the largely monopolized telegraph business in this country, at least till recently, has often been commented on.

It can scarcely be proved that any of the leading trusts have been particularly lacking in progressiveness, that they have actually made fewer improvements in methods than have been made in industries where competition was active. Comparisons on this point are virtually impossible. But the trusts have thus far been on the defensive both against potential competition and against public criticism. This defensive position has made them look closely to efficiency. Should the policy of permitting monopolistic combinations be adopted, there would be danger that the absence of competitive pressure would more than counterbalance any possible advantages from the elimination of competition.

Regulated monopoly is likely to be even less efficient than unregulated monopoly. The trust, if unrestricted in prices and profits, has at least a motive to do business as cheaply as possible. When, however, the trust anticipates that every reduction in costs may mean a reduction in prices, that profits resulting from increased efficiency may be wholly or largely taken from it by government regulation, even this motive tends to disappear. In the case of public service corporations various methods have been pursued, with more or less success, for securing a division of the advantages of increased efficiency between the public and the monopoly. Should the government enter upon the policy of regulating the prices and the profits of trusts, similar methods would have to be followed as far as possible. Because of the multifarious character of the different industries, however, it would be much harder to apply these methods successfully to trusts than to the limited number of public service enterprises.

Let us now bring together summarily the results of this discussion of the trust problem. We have tried to show that unregulated combination is dangerous to the public welfare. Even if they could be deprived of the weapons of unfair competition or of the advantages of natural monopoly — a thing by no means easy — trusts and pools would still probably possess a material degree of monopolistic power. It would be a dangerous experiment to remove the ban of the law from them without substituting effective machinery for regulation.

We have sought to show further that it is feasible to prevent by law the more formal types of combinations and of contracts in restraint of trade. It may be impossible wholly to prevent informal understandings which in some degree restrict competition. These

informal understandings, however, are far less effective in maintaining monopoly prices and charges than formal combinations such as pools and trusts.

It was pointed out that the difficulties of government regulation are exceedingly great. The policy of permitting trusts to exist at all, if not restricted to extraordinary conditions, might result in the extension of trusts over almost the entire field of industry. It might also result in practically complete monopolization by each trust of its particular field. The determination of costs and of investment as a basis for the fixing of prices and profits over the multifarious field of industry would require immensely elaborate investigations and would involve extraordinarily difficult questions of judgment. Proper adjustment to the ever varying conditions of demand would be almost impossible. A vast governmental machinery for fixing prices and profits would have to be superimposed upon the machinery of private business. Government ownership on a vast scale or even complete socialism might readily be the outcome of this policy.

Finally, it has been shown that many of the alleged advantages of trusts in efficiency could probably be secured in almost if not quite as great measure through large individual plants and through smaller combinations not powerful enough to threaten monopoly. While the suppression of competition itself may tend to bring about certain economies and other advantages, there must be set against these not only the grave difficulties of regulation, but the tendency of monopoly and of regulation itself to lessen efficiency.

It may be granted that the data and the reasoning throughout this discussion have been not altogether conclusive. It cannot be expected that every one will agree with the points of view here taken. The burden of

proof, however, rests upon the defenders of the trusts. They ask us to permit the trusts to exist, whether with or without regulation. In this they are asking a departure from what until very recently were universally considered the proper principles of law and of economics. Their argument is certainly no more conclusive than the argument of those who would suppress trusts.

To defend big business is easy. The advantages of large scale production are obvious. To identify big business and large scale production with the trust is quite another thing. The glamor of the huge corporation with its mighty plants, its splendid organization, its thorō accounting system, its integration of related processes, must not blind us. All these are essential to progress. To get them we might even be willing to pay the high price of surrendering competition. But we must be sure that they can be secured at no lower price before we tender such a compensation, or before we even enter on a path which may ultimately necessitate that compensation.

To pass from a régime of competition to one of monopoly is easy. To return from a régime of monopoly to one of competition is immensely difficult. The American people have not yet tried out fully the possibilities of competitive industry. It would be foolish to abandon the experiment thus early in our national development. If we destroy as far as possible the trusts that now exist, if we prevent trusts and combinations from being formed, we shall soon see whether it is possible to secure real competition, and whether under competition efficiency can reach a high point. If not we can readily enough change our policy. On the other hand, to accept the trusts today is to leap in the dark. Every step in that direction is difficult to retrace. The results of an experiment with permitting trusts freely to organize and with regulating them could not be deter-

mined for such a long period of time that the trusts would meantime get a grip almost impossible to shake off. In fact, we never could satisfy ourselves by such an experiment that a trust régime was more satisfactory than a régime of competition, for we should have no fair example of the working of competition under similar conditions with which to make comparison.

Particularly weak would it be to allow the mere fear of a temporary disturbance of business to turn us from a safe permanent policy. The thoughtful man can have no patience with the complaint that the government is interfering with business or lowering the prices of securities by enforcing the anti-trust law. Suppose an industrial depression should be brought about? Is that a heavy price to pay for protecting the decades and the centuries of the future against a mightly evil? Granted that it is uncertain whether the trust régime would be a mighty evil, the mere possibility that it would prove such is enough to justify a present sacrifice to avert it.

The thoughtful opponent of trusts does not urge that, as the phrase goes, the government should "run amuck." It need not in a year or two attack every combination without due inquiry as to whether it actually possesses or threatens monopoly power, or as to the manner in which it is exercising such power as it does possess. A policy once determined upon and definitely announced may be carried out with reasonable deliberation and consideration of all interests. But it is high time that an end shall be put to all doubt of the intention of the people. Either they must proclaim their determination to maintain a régime of competition in manufactures and trade for an indefinite period to come, or they must promptly declare themselves for the policy of regulation. The safe policy for today is prohibition of trusts and other monopolistic com-

binations. It is the vigorous enforcement of the anti-trust laws, aided by the provision of expert administrative machinery such as the proposed trade commission.

Whether the ultimate policy adopted toward the trust be *laissez faire*, regulation or prohibition, we shall, in all probability, find it necessary to supplement the chosen policy by vigorous exercise of the taxing power. Taxation can take away a large part of monopoly profits and other unearned gains whether derived from trusts and pools, from railroads, from banking, from control of land and other natural resources, or from any other source.

Direct taxation of trusts and other business enterprises with a view to taking away excessive gains would encounter practically the same difficulties as regulation of prices and profits. Heavy income taxes upon individuals, particularly if progressive, are very hard to enforce. Inheritance taxes would be more feasible. Progressive inheritance taxes, even with rates such that much the greater part of the largest fortunes would be taken by the government, would, in the opinion of many thoughtful men, be neither unjust nor socially disadvantageous. They are defensible even when applied to fortunes derived from strictly legitimate business. Taxes of this sort might in some degree tend to check the accumulation of capital and to prevent the efficient captain of industry from exercising his talents to the utmost, but the effect in these directions would probably not be very serious. There might, too, be some difficulty in enforcing collection and preventing evasion, but on the whole the system would go far toward correcting that immense disparity of wealth and of opportunity which is the main source of social unrest.

E. DANA DURAND.

UNIVERSITY OF MINNESOTA.